

REMARKS

Claims 1-15 are pending in the present application. Claims 1, 12, and 14 are independent.

Summary of Examiner Interview

Applicants appreciate the courtesies extended to their representative, Michael R. Cammarata, during the interview conducted on November 1, 2005. During this interview, the primary references applied (Leone and Stokes) were argued in detail mainly in relation to independent claim 1. After an extensive discussion, Primary Examiner Tuan Ho agreed with the arguments and stated that the prior art rejections are withdrawn. The arguments made during the interview are repeated below.

It was further agreed that Applicant would submit minor clarifying amendments as to claim 1 to provide a more definite antecedent basis for the term "high resolution image" and other amendments to overcome the new matter objection and drawing objection. It was further agreed that based on the reply to be filed, an update search would be performed to indicate any allowable subject matter.

Although the prior art rejections are now withdrawn, the remaining new matter and drawing objection issues require a formal response. Therefore, Applicants are filing this after-final amendment. It is further noted that this after-final amendment does not introduce any new issues. Instead, this after-final amendment reduces issues before the Examiner by canceling the amendments that gave rise to the new matter objection and accepting the Examiner's suggestion as to the drawing objection to overcome that objection. Therefore, this after-final amendment

should be entered, the prior art rejections withdrawn, and an update search should be performed in keeping with the agreement reached during the Examiner interview.

Applicants highly appreciate Examiner Aggarwal's diligence in this case. It is Applicants understanding that Examiner Aggarwal has inherited this case. It was quite apparent during the interview that Examiner Aggarwal had done his homework and was fully up to speed on the case issues. Such preparation is appreciated.

New Matter Objection

Certain sections of the amendment filed January 14, 2005 are objected to under 35 USC §132(a) because it allegedly introduces new matter into the disclosure. This objection, insofar as it pertains to the presently pending specification, is respectfully traversed.

Although Applicants do not agree with this new matter objection, to reduce issues before the Examiner Applicants have deleted the objectionable amendments. Furthermore, replacement Fig. 2 is supplied herewith that removes objectionable elements 78 and 55¹.

In view of the above-amendments, replacement Fig. 2, and arguments, Applicants hereby respectfully request reconsideration and withdrawal of the new matter objection.

Drawing Objection

The drawings are objected to under 37 CFR §1.83(a) as allegedly not showing all of the features specified in claim 2. This objection is respectfully traversed.

To resolve this objection, Applicants have accepted the Examiner's suggestion of modifying Fig. 3. Submitted herewith is replacement Fig. 3 which replaces the previously submitted Fig. 3 with the Examiner's suggested Fig. 3. Reference numbers were added to the Examiner's suggested drawings but no other changes were made. Also, supporting text has been added to the specification which closely parallels the Examiner's suggested Fig. 3.

In view of replacement Fig. 3 and the arguments above, Applicants respectfully request reconsideration and withdrawal of the drawing objection.

35 USC §103 Stokes-Leone Rejection

Claims 1 and 6-15 are rejected under 35 USC §103(a) as being unpatentable over Stokes (USP 6,295,388) in view of Leone (USP5,596,346). This rejection, insofar as it pertains to the presently pending claims, is respectfully traversed.

Stokes discloses techniques for more efficiently performing a high resolution scan of an image. Specifically, a low resolution preview scan 40 is first generated. Then, a detail area 44 may be selected by an operator. See Fig. 3. During the high resolution scan, the operator may view the detail area 44. If the image quality of the detail area is not satisfactory, then the high resolution scan is terminated. See column 3, lines 41-49. In this way, the scanning process is accelerated. The high resolution scan is quite a lengthy and time consuming process. By terminating the high resolution scan at an early stage if the image quality is unacceptable, there is an overall time savings.

¹ It is noted that the Office Action apparently mis-identifies element 56 as being the objectionable addition to Fig. 2 when it is readily apparent that element 55 was intended.

It is recognized that Stokes also mentions that standard image editing programs such as Adobe's Photoshop™ can be used to modify various characteristics of the digital image. This is nothing more than a statement that editing programs can be used in the normal way and does not provide motivation for combining Stokes with Leone. The claims are directed to a specific apparatus and method for performing red eye correction and the mere mentioning that Photoshop™ can be applied to an image for editing purposes does not suggest the specific features of the apparatus and method claims nor does it motivate one of ordinary skill in the art to combine Stokes time-saving scanning process with Leone's invention.

Leone does appear to teach red eye correction, but Leone operates on an entirely different principle than that which is claimed. Specifically, in the Leone system a user may manipulate a view point with respect to a single source image by panning and zooming the source image. The purpose of these panning and zooming operations is to enlarge the eye portion of an image such that it fills the screen as shown in Fig. 1D. This permits the user to determine if a red eye condition exists in the eye (see column 4, lines 23-32). When viewing the highly enlarged image of the eye, it is readily apparent to the user whether red eye exists. If so, the user can activate a conventional process for correcting the red eye artifact by touching the apply button 18.

Applicants emphasize that Leone's system presents a very cumbersome and time consuming process which requires the user to manually pan and zoom to each eye in the image to manually determine if red eye exists. A photograph of a large crowd would require the user to exhaustively pan and zoom onto each eye of each subject in the crowd and manually determine if red eye exists and then activate the conventional red eye correction process as to each eye

individually. This is a slow, time consuming and highly manually process that is completely inappropriate for high speed film processing which is the preferred environment of the present invention.

The present invention permits high-speed processing of film or other images representative of persons or animals by utilizing a dual resolution display. The pre-scan or low resolution image can be quickly reviewed by the user. Any area that has a potential of having red-eye may be quickly designated by the user by quickly reviewing the low resolution image. The designated regions in the low resolution image have corresponding regions in the high resolution image. It is the high resolution image that is subjected to red-eye correction. The correspondence between the low and high resolution images is another feature completely absent from both Stokes and Leone even when taken in combination.

Stokes suggestion of applying standard editing programs such as Adobe's Photoshop™ and Stokes highly manual pan/zoom process are completely insufficient to disclose or suggest the combination of designation means and red-eye correction means that is now recited in amended claim 1. In Stokes, the user may simply apply a standard editing program such as Adobe's Photoshop™ but there is no switching between low and high resolution images and particularly no designation of a region to be corrected in a low resolution image which is followed by any type of correction (let alone red-eye correction) in a high resolution image such that the region in the high resolution image corresponding to the region designated in the low resolution is corrected.

Moreover, Leone's pan/zoom process is highly manual and he merely utilizes sub-sampling or super-sampling of a single source image in order to permit the view port on the

source image to pan and zoom as the user desires. As such, there is no designation of a region to be corrected in a low resolution image followed by a red-eye correction that corrects the red-eye effect in the image data of high resolution by subjecting the eye in a region of the output image data at high resolution that corresponds to the region designated by the designation means in the low resolution image.

Even further, reading Stokes and Leone together as a combination (which Applicant does not admit as to the propriety thereof), this combination still fails to disclose or suggest the combined designation means and red-eye correction means, particularly as recited in amended claim 1. At best, the combination of Stokes and Leone would provide a system in which the high resolution scan may be terminated before it is finished and that once the high resolution scan has been completed, then the high resolution image may serve as the source image such that a pan/zoom process may be utilized by the user to manually identify where red-eye is present such that a standard red-eye correction process may be applied thereto on the highly magnified eye image. This combination would still result in a highly inefficient and quite manual process that does not achieve any of the advantages of the present invention.

In short, the combination of Stokes and Leone fails to disclose or suggest the display switching means of claim 1 for switching at least one portion for all portions of the image displayed on said display device from the low resolution to the high resolution and vice-versa. Leone's zooming process does not perform such a switching operation. While it is true that Leone generates higher resolution images through a supersampling process, there is no switching between two distinctly stored and generated images (high resolution that is finely scanned and low resolution that is pre-scanned).

Furthermore, the combination of applied art also fails to disclose or suggest the red eye correction means of claim 1 that corrects a red eye effect in the image data at the high resolution by subjecting the eye in a region of the output image data at the high resolution that corresponds to the region designated by the designation means. The applied art fails to disclose or suggest the correspondence between designating on the low resolution image and correcting the corresponding region on the high resolution image.

Furthermore, the combination of Stokes and Leone also fails to disclose or suggest the red eye correction device which takes out a region in the high resolution image data corresponding to the designated location in the low resolution image data. Nor does the combination of Leone and Stokes disclose or suggest red eye correction device correcting a red eye effect in the taken-out region of the high resolution image data that corresponds to the designated location as further recited in independent claim 12.

Furthermore, the switching device of claim 12 is also not disclosed or suggested by the applied art.

Still further, the features of independent claim 14 are also not disclosed or suggested by the applied art. Specifically, the steps of taking out a region in the high resolution image data corresponding to the designated location in the low resolution image data particularly coupled with correcting a red eye effect in the taken-out region of the high resolution image data that corresponds to the designated location are features that are certainly not disclosed or suggested by the combination of Stokes and Leone.

Also, the switching step of claim 14 is not disclosed or suggested by the applied art.

For all of the above reasons, taken alone or in combination, Applicant respectfully requests reconsideration and withdrawal of the § 103 Leone-Stokes rejection.

35 USC §103 Stokes-Leone-Yamanouchi Rejection

Claims 2-5 are rejected under 35 USC §103(a) as being unpatentable over Stokes, Leone, and Yamanouchi. This rejection, insofar as it pertains to the presently pending claims, is respectfully traversed.

As to Yamanouchi, this patent fails to remedy any of the noted deficiencies in the base combination of Stokes and Leone. Indeed, Yamanouchi is merely applied to teach the features of dependent claims 2-5 and is not relied upon in any fashion to teach or suggest the features of independent claim 1. Although Applicant disagrees with many of the statements made in regards to Yamanouchi in the Office Action, Applicant wishes to focus the patentability of the present intention upon the independent claims. As such, Yamanouchi, even when taken in combination with Leone and Stokes, fails to particularly disclose or suggest the claimed designation means and red-eye correction means, particularly as amended. The arguments above are hereby incorporated by reference and applied with equal force to the combination of Stokes, Leone, and Yamanouchi.

For all of the above reasons, taken alone or in combination, Applicant respectfully requests reconsideration and withdrawal of the § 103 Stokes-Leone-Yamanouchi rejection.

Conclusion

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Michael R. Cammarata (Reg. No. 39,491) at telephone number 703-205-8022, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Date: November 8, 2005

Respectfully submitted,

By 

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